TIIAP FY 1999
Project Narrative

City of Oakland, California

Grant # 06-60-99001
Public Services
Oakland, California

Introduction

Acorn Housing (Acorn) was built in 1968 as a Department of Housing and Urban Development (HUD) subsidized public housing project. In 1996, Bridge West Oakland Housing (BWOH), a local non-profit housing developer, bought the property and began plans to tear down the aging, 685-unit housing project and create a lower density, 293 unit community, arranged in clusters of small courtyards on three parcels of land. *(See appendix p. a-1)* In concert with this redevelopment effort, the City of Oakland Community and Economic Development Agency (CEDA), International Business Machines Corporation (IBM), BWOH and the Acorn Residents Council (ARC) are developing an innovative strategy to address the challenges facing low income families in Acorn. The result of this collaboration, initiated by ARC, is the Acorn Smart Housing Pilot (SHP) Program detailed in the following narrative.

Project Definition

Defining the problem: The 9 acre Acorn property is located in West Oakland, a HUD designated *Enhanced Enterprise Community*. West Oakland is a severely distressed urban community that is more than 90% African American, with an average household income of approximately $18,000. Over 45% of its residents do not have a high school diploma or the equivalent. Over 22% of its residents are unemployed. It also has one of the highest crime rates in the state. In 1998, over 250 violent crimes were committed in West Oakland alone. These factors combined isolate Acorn residents within their community and perpetuate a cycle of unemployment and poverty. Acorn residents are currently not accessing the tools that will enable them to break this cycle. Though there are job training opportunities in the City of Oakland, and a few, remote public access internet work stations, inadequate transportation and child care, fears associated with poor literacy skills and a general absence of peer support make accessing these existing options a significant challenge. Acorn residents recognize these challenges and propose <u>computer access in every home in their community</u> as the solution.

Proposing a credible solution: The SHP Program is the realization of a city-wide mandate issued in 1997 to include technology in the infrastructure of all new City sponsored developments. The SHP Program is based upon the understanding that easy access to computer literacy and job skills training, coordinated with the needs of local employers seeking new workers, will lay the groundwork for significant improvements in an underserved population's level of self esteem, educational attainment, income and ultimately, quality of life. Once a reliable system composed of the appropriate hardware is in place, the SHP program will operate in three phases:

1. *Skills assessment* - Under the guidance of IBM Education and Training specialists, approximately 650 Acorn residents (those in the community who are school-age and above) will be individually assessed to compile inventories of skills, education, job history and career goals.
2. *Computer literacy training* - A file will be created for each resident assessed and the inventories will be used to tailor a basic computer literacy training curriculum for that individual. The training will be facilitated by IBM Education and Training specialists and IBM identified community mentors recruited from local universities, libraries and industries. All trainers will be prepared to help residents overcome specific educational challenges they may face when working with computers, including basic math and remedial language skills. In addition, a Resident Social Service Coordinator will refer residents to supportive services for treatment of any conditions which may impede their success in the training program such as substance abuse issues. After completing the basic computer literacy training, residents will become eligible to receive a network computer in their housing unit.
3. *Job training and placement* – As an IBM identified Community Liaison develops partnerships with local employers, IBM will work with both residents and local businesses to create a job training curriculum designed to prepare them for placement in a specific job. The job training curriculum utilizes the most advanced, interactive software currently available and will be conducted at the residents' own pace at the new network terminal in their home. The training will be monitored by

IBM education specialists, and will end in IBM certification. Residents with certification will be referred to identified local employers.

The SHP Program will be implemented concurrently with Acorn's Welfare to Work program[1] which incorporates life skills, interview skills and basic organizational skills into the job training curriculum. It is important to note that all training activities facilitated by IBM in the SHP Program will be supported by volunteer peer-mentors identified with the assistance of the Oakland Community Networking Project (OCNP), a partnership of the University Oakland Metropolitan Forum and the UC Berkeley Information Systems Technology Group that has pioneered an effort to bring technology into local communities that have traditionally not participated in these innovations *(See appendix p. a-)*. The mentors will be available from the beginning stages of the program and eventually, Acorn residents at higher skill levels will be identified and trained to become mentors themselves. Access to mentors who can answer individual questions, encourage, and generally support residents as they begin to familiarize themselves with the opportunities made available is integral to program success.

Identifying outcomes: The SHP Program will impact all 293 households in the redeveloped Acorn property. Through computer access, job training and on-going mentorship, unemployed and low-income residents will improve their job skills and be exposed to new employment opportunities. These residents will first find temporary employment with the assistance of local placement agencies such as On the Move and Norell. Eventually, they will obtain and retain jobs in local industries such as Wells Fargo Bank, Pacific Bell, Oakland Computer Company and Kaiser Permanente. As a result, residents currently receiving public assistance will replace those subsidies with pay checks. They will also improve their self-esteem and educational attainment. In addition, Acorn parents will become more actively involved in their children's education and students will experience improved academic performance. The SHP Program will accomplish these goals by bringing opportunity into the residents' homes, thereby overcoming barriers that tend to isolate low income individuals including inadequate transportation and child care, fears associated with poor literacy skills, and lack of peer support.

Within the first year of program implementation, approximately 650 residents will be assessed and approximately half of that total will participate in basic computer literacy training, receive network computers in their units and then begin job training and employer referral. Within the second year, the remainder of the residents will receive the same services. By the end of the second year, as residents maintain employment, they will begin moving off public assistance. Also, by the end of the second year, parents, students and teachers in West Oakland schools will improve their communications and will be working with an enhanced K-12 curriculum (also developed as part of Acorn's Welfare to Work program) that utilizes the new technology to the students' best advantage. Students' grades and overall educational attainment will improve, as well as their self-esteem. *(See appendix p a-)*

In addition, Acorn residents will benefit from the creation of the SHP home page on the World Wide Web. With the network computers as the access tool, and the web page as the central "meeting place," students will work collaboratively on their homework assignments, the ARC will provide pertinent community updates and residents will contribute to an on-line West Oakland community newsletter.

Benefits will continue far beyond the two year grant period. The numbers of community mentors trained and identified in the first two years of the program will continue to grow within the SHP Program. Eventually, Acorn will become one of the most computer literate concentrations of households in the Bay Area. Higher rates of employment, higher incomes and improved academic performance will help to move families away from public assistance, improve self esteem, and break the cycle of poverty for generations to come. All outcomes identified here will be measured as part of the SHP program evaluation.

---

[1] Department of Labor, Employment and Training Administration, application for Welfare to Work competitive grant to be submitted in March, 1999.

Evaluation

Evaluation questions: Based on the expected outcomes, identified under "Project Definition," it will be important for the SHP Program to answer both quantitative and qualitative questions. The quantitative data will determine number of residents assessed for basic skills inventories, number participating in the computer literacy and job training curriculum, number referred to SHP Program identified employers and the number who moved off of public assistance, among other data collected. The qualitative data will answer such questions as: Did the computer based job training meet the need for skills improvement? In resident's opinion? In employer's opinion? To what degree did the job training improve resident's self esteem? To what degree did the computer access improve students' self esteem? Parent-teacher communications? *(see appendix p a-2)*

Evaluation strategy: The SHP program evaluation will be an ongoing activity beginning with the first resident assessment. Data will be collected on every resident participating in the program. The evaluation will assess not only the expected outcomes for the residents' but also the performance of the various partners in the management and implementation of the project. To this end, the evaluation will determine the effectiveness of the implementation process and the effectiveness of the instructional process.

Data collection: There will be a baseline data set created about the participants based on their assessments when they first enter the program. Individual interviews and surveys will be used to obtain the skills, views and experiences of residents. Interviews with the program staff, partners, and outside observers familiar with instructional job training will also be conducted. Follow up interviews will be conducted at the end of the first year of implementation. Other quantitative data will be collected automatically by Worldtrak software which monitors residents' progress through the interactive job training curriculum.

Data Analysis: The database on participants' background and their performance will be analyzed using SPSS for frequencies and bivariate distributions of program completion and performance outcomes for different population groups (by age, gender, ethnicity, levels of education, public assistance status, etc.) The resident interviews will be used in conjunction with the analysis of program data to create a more complete picture of how and why the program worked well or less effectively for the different types of participants. Material gathered from site visits and program documents will provide the basis for an institutional analysis to augment the quantitative assessment.

Evaluator: The evaluator's role will be to independently assess the overall effectiveness and efficiency of the Acorn SHP Program in meeting its objectives in terms of the strategy described above. CEDA has enlisted the support of the Oakland University Metropolitan Forum, an affiliate organization of the OCNP which is responsible for recruiting SHP peer mentors. Dr. Judith Innes, Professor of City and Regional Planning will supervise the work of graduate students and faculty advisors. Dr Innes is an experienced evaluator whose recent projects through the Forum include the evaluation of Oakland's HOPE IV public housing revitalization program and establishment of a new job training performance standards for the City.

Budgeting the evaluation: The costs of obtaining the quantitative data through the use of Worldtrak are subsumed in the cost of the software and the matching funds of CEDA salaries. For the remainder of the program evaluation, a total of $60,000 has been budgeted for the Forum's participation.

Project Significance

The Smart Housing innovation: The SHP Program has gained national recognition through the hard work and determination of its public and private partners. It represents a successful collaboration among Acorn residents, the City of Oakland, IBM, BWOH, Oakland public schools, and other

community based organizations. The significance of this collaboration was recognized by HUD when Acorn received a "Blue Ribbon Practice in Housing and Community Development" award in 1998 for improving economic opportunity of its residents *(See appendix p a-5).*

The SHP Program will become the first of its kind, putting Acorn at the forefront of publicly-assisted housing developments across the nation. Never before has a community like Acorn planned to create an on-site, staffed learning center linked via fiber optic cable to network computers in each individual housing unit. Having a network computer in each unit is the key to overcoming barriers that isolate so many low-income populations. Being able to work at a self-guided pace in the comfort of home also helps to remove barriers to accessing traditional computer training programs such as inadequate transportation and child care, while alleviating fears associated with poor literacy skills and a general lack of familiarity with computers. Coupled with improved access is the most sophisticated job training software available which integrates advanced video, audio, text and graphics capabilities to improve basic literacy, typing, spread sheet and word processing skills.

The SHP Program builds upon previously designated TIIAP projects including the 1996 award to Trinity College in Hartford, Connecticut which brought together local public schools, private colleges and community based non-profits to create scattered internet access sites for residents of a local public housing project. This project was one of the first to offer new ways to improve access to information resources and break the cycle of urban poverty. Similarly, via internet access to Distance Learning Centers, other TIIAP projects have offered public housing residents the opportunity to obtain a college degree. The SHP Program takes these concepts much further, offering Acorn residents the benefit of being able to access technology in their homes, any time they want. It also integrates sophisticated job training software and provides the ongoing technical and personal support that will *ensure* the technology improves their quality of life.

Establishing a model project: Already the SHP Program is being watched carefully by other municipalities around the nation as a demonstration of how access to technology, coupled with personalized training, can improve the standard of living in even the most impoverished, crime ridden communities. *(See appendix p. a-7)* Many inner-city residents face the same transportation and child care obstacles that hinder their ability to access job training. Furthermore, many lack the education, practical support, role models, and resources necessary to identify potential employers and compete in today's job market. Removing these obstacles by bringing the technology and training to the residents of public housing is a benefit to the underemployed and their potential employers but also to their communities at-large, local governments, and schools. In the partnership fostered by the SHP Program, Acorn residents will realize an improved quality of life, employers will access a new pool of qualified workers, students will receive educational opportunity equal to their peers and as a result, neighborhood and crime rates will fall fostering new economic opportunity. These long-term benefits could be realized in other distressed urban areas where a growing number of publicly assisted housing projects are being redeveloped. Access to technology is the seed that, with partnership, leads to community growth and development.

Project Feasibility
Technical approach: IBM and the other partners in the SHP Program have agreed to install a Local Area Network (LAN) on the Acorn property that will consist of a network computer in each housing unit linked via underground fiber cable to two servers housed in Acorn's Learning Center. (The other two servers will be located on parcel 3.) The servers will have T1 access to the internet. One shared media hub with a router and network booster will provide connectivity for buildings of 12 housing units each. *(See appendix p a-11 and a-12)*

1. *Interoperability* – The Acorn network is designed as a stand-alone system but has the capability to access the internet as well as other network servers. For example, the Acorn network will be able to access job search information housed on the Oakland Private Industry Council's database,

community events schedules provided by the local YMCA, and educational resources made available on the Oakland Unified School District's server, to name a few. Standards included in the SHP model include Microsoft word processing, spreadsheet, graphics, and accounting applications as well as PacBell Internet service provision. IBM is also recommending installing GED curriculum and a multimedia literacy program, called Sequoyah, that allows students to make strides in both reading comprehension and word recognition. These standards were chosen because of their quality and wide applicability, as well as the offer of significantly reduced cost. Proprietary elements of the SHP model include the computer literacy training and the job training curriculum specifically designed for Acorn residents to meet their needs as well as those of local employers.

2. *Technical alternatives -* Network computers are recommended over PC's for installation in each housing unit for three reasons. First, network computers extend access to network applications, intranets and the internet while lowering the total cost with reduced up-front expenses and significantly lessening support agreements. Second, network computers are also appealing in the manageability of data and applications stored on a central server. Finally, network computers minimize security risks where they can not be easily enforced because they have little value once removed from their intended environment. IBM is also recommending installation of a fiber cable backbone from the Learning Center, connected to copper wire in the buildings to handle all data transmissions. Two servers are recommended so that one can provide backup and recovery while the system undergoes periodic maintenance. Also, the SHP Program is at the optimum stage for making long term decisions regarding cabling. Fiber has the capacity to support the program's needs for the foreseeable future. Fiber cable is more expensive than copper, but it is significantly faster and will work over longer distances (3 miles versus 300 feet). The growth in technology will certainly outpace copper. In addition, the cost of stripping the outdated copper wiring in a few years and installing fiber cable may be up to three times as expensive. The cabling is complete on Acorn Parcels 1 and 2. Cabling will be installed on Parcel 3 beginning in April of 1999.

3. *Scalability –* The SHP program is not focused on growth in number of users in future years, but rather services provided. As residents seek higher paying jobs and or promotions, the network will accommodate their needs with the newest software available designed to keep them competitive with the rest of the labor force. The use of four 9 gigabyte servers will allow the SHP program to add software applications and upgrades to the network necessary to accommodate the growing needs and skills of residents. Also, the installation of a T1 line will allow the network to handle unlimited internet traffic, as residents learn to access information and external communications grow in frequency.

4. *Maintenance -* The system will be maintained and continually upgraded by IBM throughout the life of the TIIAP grant. The growth in software applications described above will be easily accommodated because the SHP program has chosen to use a system of network computers – only the main servers need to be upgraded, not the hardware in each housing unit.

Applicant qualifications: The SHP Program's **administrative team** and its partners represent a mix of information technology experts, local government representatives and community representatives, all with extensive experience working with the target community. The project administrators include: CEDA Director of Housing and Community Development Roy Schweyer; CEDA Project Manager Laura Simpson; IBM Project Manager Bill Warren; BWOH President Carol Galante; IBM identified Learning Center Administrators, and BWOH identified Resident Social Service Coordinator and Resident Outreach Assistant.

The CEDA staff members involved have overseen the construction and rehabilitation of more than 5,000 affordable housing units and the administration of associated supportive services in the City of Oakland. Bill Warren has been with IBM Education and Training for the last 25 years, and is an active member of the Oakland City Information Infrastructure, established by UC Berkeley to develop training programs for low income families. In her 12 years with BWOH, Carol Galante has overseen

the redevelopment of 6,000 homes. She has extensive expertise in the redevelopment of mix income communities in other Bay Area Cities. The IBM identified Learning Center Administrators will have LAN installation experience and at least 2 years of network administration experience. The Resident Social Service Coordinator and Resident Outreach Assistant will have two to three years experience working with low income populations and will have a demonstrated ability or cooperate with staff, residents and community groups.

SHP **program partners** include: Janet Patterson, President of ARC and 30 year resident of Acorn; Hank Baker, Client Solutions Manager for IBM; Calvin Whitaker of PacBell; Oakland Unified School District; City of Oakland Workforce Development, a division of CEDA; On the Move and Tascor job placement agencies; and Oakland Computer Company (OCC), a local minority/woman owned business. In addition, CEDA and partners will sub contract services for two services: Community Liaison and System Maintenance Provider. *(See appendix p -)*

Budget, implementation schedule and timeline: This SHP Program proposal outlines the costs associated with creating the infrastructure to provide technology in a community that would not have it otherwise. CEDA's request for TIIAP funding will help purchase much of the hardware needed as well as provide stipends for the peer mentors, with the remainder of the project's financial support for software and staffing provided as matching funds. The items identified in the attached SHP Program budget provide residents the highest quality hardware and software integral to providing long-term benefits to users, while remaining sensitive to overall project cost. The implementation schedule and timeline identifies the SHP program's objectives from the planning stages through implementation, highlighting those activities conducted during the two year TIIAP budget period. *(See appnedix p.)*

Sustainability: Anticipated ongoing program expenses will include staffing the learning center, maintaining the security and functionality of the network servers, service agreements, and software upgrades and additions. As the property owner, funds to sustain these activities will be provided by BWOH on an ongoing basis and will be supported by private foundation grants. In addition, as the SHP program's evaluation is completed, the project team and its new volunteer mentors will offer training to interested groups around the nation for a small administrative fee, to be applied toward ongoing SHP expenses. This service will be advertised on the SHP website. Each of the project team members will remain with the project retaining a role beyond the grant period. CEDA's participation will remain an in-kind contribution. Also, throughout the implementation period, CEDA, IBM and BWOH will identify Acorn residents with the skills to take leadership roles in the program as learning center volunteers, mentors and community liaisons. Acorn residents will continue to play an active role in the success of the program beyond the implementation stage.

Community Involvement
Partnerships: CEDA Director of Housing and Community Development Roy Schweyer will oversee the administration of the project as a **.05 FTE**. This is an in kind contribution from CEDA. CEDA Project Managers Laura Simpson will administer all SHP contracts and coordinate all project partnerships, as a **.25 FTE.** This is an in-kind contribution from CEDA.

IBM Project Manager Bill Warren will be the lead IBM representative for the SHP Program and will oversee hardware and software installation and the initial resident skills assessment, identify learning center staff and basic computer skills and job skills trainers, help to coordinate peer-mentors, work with the Community Liaison to identify local jobs and will administer sub-contract with system maintenance service provider as a **.75 FTE.** This is an in kind contribution from IBM.

BWOH President Carol Galante will be participating in the implementation of the program to oversee all on-site services and maintain consistency as the program transitions to BWOH administration beyond the life of the TIIAP grant as a **.10 FTE**. This is an in kind contribution from BWOH.

IBM identified Learning Center Administrators will coordinate and administer basic computer skills training as well as oversee job training. Learning center staff will help to identify and train peer-mentors and will also be available to residents in their units as needed to offer ongoing technical support as **1.5 FTEs** combined. Learning center staff will also maintain system security and physical security with property management sub-contracted by BWOH. This is an in-kind contribution from CEDA. The Resident Social Service Coordinator and Resident Outreach Assistant will provide case management for residents and their families and will refer them to health and social services as **1.5** FTEs combined.

Benefits of participation in the SHP program are mutual. As administrators, CEDA and BWOH expect to be among the first community and economic development agencies in the country to successfully integrate technology and supportive services into the redevelopment of a large, mixed income, publicly assisted housing community. For IBM and PacBell, participation in the SHP program will provide a valuable, high-profile opportunity to prove an ability to apply its hardware, technological advances and associated training expertise to benefit a new end user, in a non-traditional environment.

Among program partners, the central beneficiaries are Acorn residents, represented by Janet Patterson, President of ARC. Living in Acorn since it was built in 1969, now acting as one of the leaders of the ongoing effort to bring new opportunity to her community, Janet expects to realize significant benefits for herself and her 16 year old son as well as her friends and neighbors.

OCNP and the forum will gain the rare opportunity to quantify the benefits of job training for an underserved population when they author their much anticipated evaluation findings. Oakland Unified School District will gain a new opportunity to remove barriers to success reach a difficult to serve population of students. CEDA's Workforce Development division, On the Move and Tascor job placement agencies will gain a new pool of clients for referral and local businesses will gain a workforce trained specifically to meet their needs.

Involvement in the community: Several years before the SHP Program was conceived, CEDA began working with Acorn residents to determine how HUD would redevelop the aging property and turn it over to BWOH. A strong working relationship was established between ARC, CEDA and BWOH to develop the Acorn Community plan of 1995 which outlined the residents' goals for their community related to job training, transportation, safety and housing standards. During this process, ARC received two seats on BWOH's governing board and continues to participate in their regular meetings.

Acorn residents have been integral to the SHP Program's development from the outset. After IBM submitted a proposal to the City, Acorn was selected as the site for program implementation because of its long history of strong resident advocacy. BWOH had already planned an on-site learning center as part of the rehabilitation, but the SHP development team's vision carried that idea even further, advocating for network terminals in each new unit. Ideas about the content of job training and K-12 curriculum enhancement continue to develop at bi-monthly ARC meetings featuring the participation of CEDA, BWOH and IBM. This productive working relationship will contribute to the success of the project team in the implementation phase of the SHP Program and to the strength of the additional partnerships needed to foster its long term viability.

Support for End Users: After the initial skills assessment is completed of all 650 residents school age and older, IBM will tailor a basic computer literacy training curriculum for each individual. The training will cover basic literacy, typing, spread sheet and word processing skills and will take approximately six weeks to three months depending on skill level. If necessary, trainers and volunteer peer mentors will be prepared to help residents overcome specific educational challenges they may face when working with computers, including basic math and remedial language skills. At any point in the process, trainers will work with the Resident Social Service Coordinator and Resident Outreach Assistant to refer residents to other supportive services where appropriate, ensuring there are no SHP Program drop-outs.

When residents have completed basic training they will be guided through the interactive job training curriculum which can be conducted on the resident's new network terminal in their home. Students will learn through a combination of video, audio, text, workbook and instructor led software training. The training ends in IBM approved certification. Ongoing support for residents with technical questions will be provided by learning center staff and peer-mentors in the learning center on a drop in basis, via e-mail, and in the residents' housing units as appropriate.

Privacy and Security: IBM, CEDA and ARC will work together to develop policy mechanisms to deter improper use of technology/equipment. These mechanisms will be clearly explained to residents during the training phase. All residents will be asked to terms of acceptable use prior to receiving a network terminal in their unit. Learning Center staff will be responsible for maintaining system security and will work with BWOH's property management company in this effort. They will be the only individuals authorized to download software applications onto the network, thereby insuring the integrity of the system. If the network should fail, IBM subcontracted system maintenance specialists will respond on an on-call basis. To insure privacy, Learning Center staff will maintain inventory of each housing unit's system identification, assigned when a network computer is installed. The status of each resident's progress in the job training curriculum will be kept private, monitored only by learning center staff and the IBM project manager.

Reducing Disparities
Description and documentation of disparities: The median household income for the three West Oakland census tracts containing the Acorn Village is approximately $18,000, in contrast to $47,000 for the City of Oakland. It is estimated that 85% of Acorn residents are on Temporary Assistance for Needy Families (TANF) or Supplemental Security Income (SSI). The unemployment rate in the three census tracts that contain the Acorn property is 22% compared to 4% for the County. The percentage of individuals without a high school diploma or GED within these census tracts is 45% compared to 27% for the City of Oakland and 19% for the County. Another indicator of disadvantage is the poor academic performance of West Oakland students. In some West Oakland elementary schools, 89 percent of students are below grade level in reading and up to 95 percent are below in math.

Strategies for overcoming barriers to access: All of these factors have put Acorn residents at a significant disadvantage when competing in today's job market. Add to that inadequate transportation, child care and lack of peer support and residents become further isolated within their community. Access to computers and job training provide the tools to remove the barriers to employment. Accurate assessment of residents' as well as local employers' needs, and the according design of flexible yet effective computer literacy training, is crucial to the overall program success. The SHP program aims to bring opportunity to Acorn residents, eliminating these barriers and breaking the cycle of poverty.

Documentation and Dissemination
Documentation Plan: Interested parties from both the technology field as well as community and economic development agencies will be able to access information about Acorn's progress by visiting the AHP web site. CEDA and BWOH, with the assistance of program evaluators will be responsible for posting information on SHP project achievements and milestones identified at the outset of the program. E-mail will be fielded by Learning Center Administrators and where appropriate will be forwarded to CEDA, BWOH or IBM.

Information Dissemination Plan: IBM is in an optimal position to disseminate the information learned throughout SHP program implementation at regularly attended network, PC and connectivity forums, conferences and meetings. CEDA and BWOH will share information with colleagues as

members of the California Redevelopment Association, the National Association of Housing and Redevelopment Officials and the Non-profit Housing Association.